GEOL 1010 – PHYSICAL GEOLOGY (3/0/3)
An introduction to the scope of geology, concepts involved, the several branches of science, and the economic, and cultural aspects of science. Topics include minerals and rocks and their formation, the geologic process of weathering, physical agents, landforms, and their interpretation. (400601)

FLETCHER TECHNICAL COMMUNITY COLLEGE

310 St. Charles St.
Houma, LA 70360

Geology 1010A Syllabus
(Introductory Physical Geology)

James M. Sothern
Instructor
(Adjunct)

4448 Grand Caillou Rd.
Houma, LA - 70363

(985) 855 - 2220

REQUIRED MATERIALS;

Textbook - Earth - An introduction to Physical Geology. Tarbuck & Lutgens, Eighth Edition. Notebook, pen, pencils.

Method - The course will primarily be lectures, adhering to the contents of the above text. However, some additional material will be presented, such as rock and fossil specimens, visual aids, and other pertinent literature. In addition, all students will be required to pursue an independent research project using the resources available in the school library. Detailed instructions and a listing of topics will be presented during the beginning of the semester.

Testing and Evaluation - All test dates and chapter contents will be announced in advance. Chapter summary or review will be given prior to each test. Grading schedule is as follows:

A- 90 - 100 % - 12 quality credits
B- 80 - 89 % - 9 quality credits
C -70 - 79 % - 6 quality credits
D- 60 - 69 % - 3 quality credits
F - 59 or below - 0 quality credits

Extra Credits - Students are encouraged to earn extra points by presenting research papers, document collections, fossil or rock sample collections or any other endeavor approved by the instructor. Points achieved by the above will be added to the overall point average of the participating student. The point value of each project will be determined by the instructor with Staff approval..

Final Grade - The final grade will be derived from the average of all Chapter tests, the research project and any extra points accumulated.

Attendance - The attendance policy in the student handbook will be adhered to.

General Rules - Drinking or eating in class is not permitted. Students are expected to get permission from the instructor before leaving the classroom. All cell phones must be turned off during class, except in an emergency. Students are expected to act in accordance to the rules set forth in the Student Handbook.

Academic Honesty - Cheating, plagiarism and other forms of dishonesty are prohibited. The instructor or institutional staff will impose disciplinary sanctions upon any student violating the Academic Honesty Policy of this institution.

Students with Disabilities - This institution complies with section 504 and the Americans with Disabilities Act. Students with disabilities who seek accommodations must make their requests known by contacting the Disabilities Coordinator (Mr. Bilello in Student Services) at the beginning of each semester. If a disability is identified later in the semester, a non - retroactive accommodation plan will be developed.

Outline of Topics

Chapters

1. Introduction to Geology
2. Plate Tectonics
3. Matter and Minerals
4. Igneous Rocks
5. Volcanoes
6. Weathering and Soils
7. Sedimentary Rocks
8. Metamorphic Rocks
9. Geologic Time
10. Crustal Deformation
11. Earthquakes
12. Earths Interior
13. Divergent Boundaries
14. Convergent Boundaries
15. Mass Wasting
16. Running Water*
17. Groundwater
18. Glaciers
19. Deserts and Winds
20. Shorelines
21. Energy and Mineral Resources
22. Planetary Geology

*Additional material, not included in text, will be presented at this point. This additional material will primarily be an overview of coastal subsidence and erosion in Southeast Louisiana and the recent physical and historical geology of the area.

Competencies and Objectives

Students are expected to read the entire assigned text during the course of the semester. In addition, students should have a working knowledge of all the terminology presented in the text. Key terms are listed and explained at the end of each chapter.

Also at the end of each chapter is a listing of review questions. Students are expected to be able to answer these questions correctly, and have an understanding of any principles and procedures presented therein.

Before testing, students will be given a review of the material to be covered in the ensuing test. A portion of the review will be sample questions similar to the actual questions on the test.

Finally, at the end of the course, students should be able to intelligently discuss the following:

1. Evidence of plate tectonics and corresponding theories
2. The physical and chemical properties of minerals and their corresponding atomic structure.
3. The distinguishing characteristics of igneous rocks and their origin.
4. The classification of sedimentary rocks, and the sequence of their formation.
5. The agents of metamorphism and types of metamorphic rocks produced.
6. Types of structural deformation, Description of folds, faults and their tectonic settings.
7. Relationship between earthquakes and plate tectonics.
8. The relationships between chemical and mechanical weathering.
9. The geologic work of running water and its effect on human habitation and activities.
10. The vastness of geologic time and the geologic time scale.
11. Energy and mineral resources and the role geology plays in their acquisition and use.

Student_____

Test No. 1_____%

Test No 2_____%

Test No, 3_____%

Test No. 4_____%

Test No. 5_____%

Test No. 6_____%

Test No. 7_____%

Test No. 8_____%

Test No. 9_____%

Test No.10_____%

Final Average_____

Extra Points_____

FINAL GRADE_____

Course Transferability:
General education courses that are listed on the Louisiana Board of Regents' *Statewide Student Transfer Guide and Articulation Matrix* are transferable to other public four-year universities and two-year colleges in Louisiana. This publication is available at the Board of Regents' website at **www.regents.state.la.us** . Courses taught by instructors holding a master's degree may be transferable. Students should check with the receiving institution concerning these courses.